AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Page 15, line 35, add the following new paragraph:

Brief Description of the Drawings

Delete the paragraph spanning lines 36-37 of page 15 and insert the following new paragraph therefor:

Figure 1 illustrates Figures 1A and 1B illustrate the plasmids used in the production of mutants in accordance with the invention.

Delete the paragraph spanning lines 4-5 of page 16 and insert the following new paragraph therefor:

<u>Figure 3 shows</u>Figures 3A-3H show the results of thermostability experiments on various luciferase mutants;

Delete the paragraph spanning line 29 on page 16 and insert the following therefor:

1 μl BiotaqTM <u>BIOTAQ (thermostable) DNA</u> polymerase (5U)

Delete the paragraph spanning lines 18-23 on page 17 and insert the following therefor:

The PCR products were purified from the reaction mix using a Clontech

Advantage-™ ADVANTAGE PCR-pure kit. An aliquot of the purified products was then

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digested with the restriction enzymes Ndel and Xhol. The digested PCR products were then "cleaned up" with the Advantage ADVANTAGE kit and ligated into the vector pET23a which had been digested with the same enzymes.

Delete the paragraph spanning lines 1-3 of page 18 and insert the following therefor:

The ligated DNAs were then purified using the Advantage[™] ADVANTAGE kit and then electroporated into electrocompetent *E. coli* HB101 cells (1mm cuvettes, 1.8 Kv).

Delete the paragraph on line 23 of page 19 and insert the following therefor:

1 µ1 Biotaq TM BIOTAQ (thermostable) DNA polymerase (5U)

Delete the paragraph spanning lines 1-6 on page 20 and insert the following therefor:

The PCR products were purified from the reaction mix using a Clontech AdvantageTM ADVANTAGE PCR-Pure kit. An aliquot of the purified products was then digested wit the restriction enzymes Ndel and Xhol. The digested PCR products were then "cleaned up" with the AdvantageTM ADVANTAGE kit and ligated into the vector pET23a, which had been digested with the same enzymes.